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NASA Procedural Requirements

COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES**NPR 8621.1D**

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Subject: NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping

Responsible Office: Office of Safety and Mission Assurance

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Chapter 4. Mishap Investigation Process

4.1 Mishap Investigation Analysis

4.1.1 The Center or Program/Project IA shall:

- a. Determine what happened, when it happened, and why it happened with the goal of preventing incident recurrence and similar incident occurrence.
- b. Use a structured analysis (such as Fault Tree Analysis or Human Factors Analysis) technique to establish elements in 4.1.1.a.

Note: For aviation Type A, Type B, or high-visibility events, NASA HFACS will be performed by the Human Factors member.

4.2 Site Safety and Evidence Preservation and Impoundment

4.2.1 After arriving at the mishap site, the Center or Program/Project IA shall:

- a. Verify the mishap site is safe and secured.
- b. Confirm evidence has been preserved and impounded, which includes the following:
 - (1) Relevant perishable evidence has been collected, photographed, and documented or impounded or both.
 - (2) All necessary data, records, and equipment have been impounded and stored in a secure site.
- c. Take custody of all evidence gathered at the scene and all data pertaining to the investigation including impounded records; determine the status of impounded records and equipment; and develop a record of the actions taken by the IRT, the cognizant Safety Office, emergency response, and protective services personnel.

4.3 Evidence and Fact Gathering

4.3.1 The Center or Program/Project IA shall:

- a. Collect, to the extent needed, and evaluate all available data and records relevant to the mishap. These data and records are not limited to those generated concurrently or as a result of the mishap, but also include relevant

information such as historical, environmental, operational, and other information.

b. When conducting privileged witness interviews, permit only Federal employees to be present at an interview with the exception of the interviewee and contractors hired specifically to support interviews.

c. Interview witnesses with two basic objectives in mind:

(1) Determine witness observations or actions.

(2) Elicit witness opinions of possible causes of the mishap.

Note 1: The IA reviews available information and evidence and considers other factors associated with the mishap to identify potential witnesses.

Note 2: Interviewees may include personnel at other locations or performing other work that may have influenced decisions, processes, materials, or systems involved in developing mishap conditions.

d. Before an interview begins, inform the interviewee if the information to be gathered during the interview is privileged.

Note: If the same person is interviewed multiple times, this should occur each time the person is interviewed.

4.3.2 In the event the IA decides to conduct an interview in which the discussion is kept privileged, the Center or Program/Project interviewer shall read the statement in Figure 1 of this NPR and inform the interviewee of the following provisions:

a. The witness oral or written statement will be retained as part of the investigation report background files but will not be released as part of the mishap investigation report.

b. NASA makes every effort to keep the witness statements privileged to the greatest extent permitted by law.

The purpose of this safety investigation is to determine the proximate causes and root causes of the mishap that occurred on _____ and to develop recommendations toward the prevention of similar mishaps. It is not our purpose to place blame or to determine legal liability. Your statement is entirely voluntary, but we hope that you will assist the investigating authority to the maximum extent of your knowledge in this matter.

Your statement will be documented and retained as part of the mishap record background file but will not be released with your name as part of the mishap investigation report.

The investigating authority will make every effort to keep your statement confidential and privileged to the greatest extent permitted by law.

Figure 1. Required Formal Interview Initial Statement

4.3.3 The Center or Program/Project interviewee shall not receive a copy of the privileged statement given in the course of a NASA mishap investigation.

Note: NASA cannot ensure privilege and confidentiality if interviewee statements or transcripts of the statement are provided to an interviewee.

4.4 Findings Determination

4.4.1 The Center or Program/Project IA shall:

- a. For Type A and Type B mishaps and high-visibility mishaps and close calls, determine the sequence of events and conditions and document them in a timeline.
- b. Determine relationships, supported by facts, of events and conditions to the undesired outcome.

4.4.2 NASA Advisories.

4.4.2.1 The Center or Program/Project IA shall:

- a. Create a NASA Advisory (using the NASA Advisory Reporting System (NARS <https://nars.nasa.gov/>, per NPR 8735.1, Exchange of Problem Data Using NASA Advisories and the Government-Industry Data Exchange Program (GIDEP)) at any time during the investigation when the IA identifies a safety finding requiring immediate action and could impact one or more Centers or when NASA-wide implications are present.
- b. Obtain approval from the IA legal and public affairs advisors or by local policy via NARS.

4.4.2.2 OSMA will distribute the NASA Advisory electronically to Agency SMA personnel.

4.4.2.3 OSMA maintains the distribution lists for status reports (section 4.6) and mishap related NASA Advisories and makes them available on the NASA Mishap Investigation Web site.

4.5 Recommendations Generation.

4.5.1 The Center or Program/Project IA shall:

- a. Develop recommendations to prevent incident reoccurrence and similar or like incident occurrence.
- b. Confirm the recommendations are clear, verifiable, achievable, measurable, and traceable to at least one significant finding.

4.5.2 The Center or Program/Project AO shall:

- a. Assess recommendations according to their effectiveness in reducing likelihood and consequence of causal factor reoccurrence.
- b. Communicate recommendations outside his or her authority to the responsible NASA organization or external body for implementation of corrective action.

4.6 Status Reports

4.6.1 The Center or Program/Project IA shall:

- a. Develop a publicly releasable investigation status report for NASA Type A and Type B mishaps and high-visibility mishaps and close calls every 30 workdays from the time the appointment letter is signed until the mishap investigation report is signed. The template obtained from the NSC mishap support specialist will be used.

Note: The AO may require status information at other intervals from the IA.

- b. Distribute the approved status report to the AO, responsible CD or Program Manager, Cognizant Safety Office, OSMA, OCHMO, and Agency SMA personnel through an approved distribution list.
- c. Post 30-day status report to the mishap record in NMIS.

4.6.2 The Center or Program/Project IA shall document facts on the investigation status to date in the status report.

Note: A status report is a publicly releasable document approved by the public affairs and legal advisors assigned to the IA. The status report described in this section is not approved or issued by OCOM and is not to be confused with a public affairs status report, which is prepared by the HQ public affairs advisor and issued by OCOM to the news and information media.

4.7 Other Investigation Types

- 4.7.1 If it is reasonably suspected a mishap resulted from criminal or hostile activity, the Center or Program/Project IA shall halt the investigation; immediately notify the OIG, the AO, and the Office of the General Counsel or the

Office of the Chief Counsel.

4.7.2 The Center or Program/Project IA chairperson shall only release privileged witness statements and related material to the OIG upon receipt of a written request signed by the Inspector General or Deputy Inspector General, addressed to the NASA Administrator or Deputy Administrator, and forwarded to the IA chairperson from the Administrator's office.

Note: The OIG respects and, as a general rule, will defer to the disclosure restrictions of NASA mishap investigations. Upon receipt of such information, the OIG will consider it confidential and treat it as such to the full extent required by the Inspector General Act of 1978, 5 U.S.C. app. 3.

4.8 Mishap Site Release

4.8.1 Only the IA chairperson is authorized to release the mishap site and impounded data, records, equipment, or facilities with concurrence of legal advisor.

4.8.2 The Center or Program/Project IA shall not release original data and records.

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